

## **REMARKS**

### **I. INTRODUCTION**

Favorable reconsideration of this application, in light of the present amendments and the following discussion, is respectfully requested.

### **II. STATUS OF THE CLAIMS**

Claims 1-9 have been cancelled; and Claims 10-15 have been added. Claims 10-15 are now pending with claim 10 being the sole independent claim. It is respectfully submitted that no new matter is added by this amendment.

### **III. SUMMARY OF THE OFFICE ACTION**

In the outstanding Office Action, acknowledgement is made of the claim to foreign priority, however, it is noted that the certified copy of the priority document has not been submitted; the drawings were objected to for not complying with one or more conditions under 37 C.F.R. § 1.84(p)(4) and 37 C.F.R. § 1.283(a); the specification is objected to as failing to provide proper antecedent basis for the claimed subject matter; the title is objected to as not being descriptive; Claims 1 and 7-9 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention; Claim 1 is also rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,0008,988 to *Putz* (hereinafter *Putz*); and Claims 7-9 are considered to be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112, second paragraph set forth in the Office Action. For the reasons discussed below, the objection and rejections are respectfully traversed.

### **IV. PRIORITY DOCUMENT**

Applicant submits under separate cover via hand-carry a certified copy of the priority document application no. PV 2003-923.

**V. OBJECTIONS TO THE DRAWINGS**

The drawings are objected to for several informalities. In response, Replacement Drawing Sheets are submitted herewith. Applicant submits that the corrected drawing sheets address the objections made in the Office Action. In particular, the missing “sidewall” 12 is added to Figure 3; and Figures 4-5 have been amended to designate the “sliding element” 31 and 41 and the “guide ring” 72 and 82. With regard to the subject matter of claims 7 and 8, those claims are cancelled thereby rendering the objection moot. Regarding elements 1 and 2, the specification is amended such that element 1 refers to only a “casing” and element 2 refers only to a “piston.”

Therefore, Applicant respectfully requests reconsideration and withdrawal of the objections to the drawings.

**VI. OBJECTIONS TO THE SPECIFICATION**

Applicant initially notes that the Specification is amended consistent with the amendments to the claims. For example, “conducting ring” is changed to “guide ring”, “conducting element” is changed to “sliding means”, and “conducting shaft” is changed to “guide shaft.” Regarding the subject matter of claims 7 and 8, those claims are cancelled, thereby rendering the objection moot. Accordingly, Applicant requests withdrawal of the objection to the specification. No new matter has been added.

**VII. OBJECTION TO THE TITLE**

In response to the objection to the title, Applicant amends the title to “Rotating Piston Machine with Dual Suspension.” Applicant submits that the new title is descriptive and respectfully requests withdrawal of the objection to the title.

## **VIII. THE REJECTIONS OF THE CLAIMS**

### **A. Brief Description of the Preferred Embodiment**

The preferred embodiment of the invention relates to a rotating piston machine that provides suspension of the rotary piston 2 by two separate suspensions, a first suspension and a second suspension. The first suspension of the piston 2 may be provided by a guide ring 72, 82. The rotary piston 2 has a cavity of cylindrical form and the cavity of the rotary piston 2 is filled with a sliding element 31, 41. The sliding element 31, 41 has an elongated recess with opposite planar inside walls (51, 61). The opposite inside walls of the elongated recess of the sliding element 31, 41 serve for sliding fit of one (first) end of the guide ring 72, 82.

The first end of the guide ring 72, 82 can be of cylindrical form or can be provided with two opposite planar surfaces, both for sliding of the first end of the guide ring 72, 82 with respect to the planar side walls of the elongated recess. The other (second) end of the guide ring 72, 82 is pivoted in the side wall 11, 12 (in a rotating way). Advantageously, the second end of the guide ring 72, 82 can be pivoted in the sidewall 11, 12 in a rotating way and in a sliding way in a direction normal to the axis of the guide ring 72, 82.

The second suspension of the piston 2 is provided by a supporting eccentric member 10 and a supporting shaft 91. The supporting eccentric member 10 may be a ring collar (of a cylindrical form) connected with the shaft 91 and positioned eccentrically with respect to the axis of the shaft 91. In the cylindrical cavity of the piston 2, a bearing (marked by rectangles with crossed diagonals) is mounted. The inner ring of the bearing is mounted on the supporting eccentric member 10 of the supporting shaft 91. The guide ring 72, 82 is provided with a bore and the supporting shaft 91 protrudes in an axial direction through the bore of the guide ring 72, 82. The

supporting shaft 91 is connected in rotational way with the housing (sidewalls 11, 12) of the rotary piston machine.

**B. New Independent Claim 10**

New independent claim 10 is similar to cancelled independent claim 1 and eliminates any indefinite language. Specifically, claim 10 recites a machine with a rotary piston mounted between at least one sidewall (e.g. 11, 12) and a curved circumferential wall (e.g. 1) of a cylinder, the rotary piston (e.g. 2) being mounted in both a rotating way around two parallel axes (e.g. 7, 8) of rotation, which are normal to the sidewall (e.g. 11, 12) of the cylinder, and in a sliding way in two directions normal to the axes (e.g. 7, 8) of rotation and to one another, wherein the rotary piston is supported by sliding means (e.g. 5, 6) on a guide ring (e.g. 72, 82), the guide ring (e.g. 72, 82) pivots in the sidewall (e.g. 11, 12) in a rotating way around the axes (e.g. 7, 8) of rotation, the guide ring (e.g. 72, 82) having a bore; and a supporting shaft (e.g. 91) passing through the bore of the guide ring (e.g. 72, 82), wherein the rotary piston is supported on the supporting shaft (e.g. 91) for a sliding movement normal to the axes (e.g. 7, 8) of the supporting shaft and in a rotating way on a supporting eccentric member (e.g. 10) connected with the supporting shaft.

**C. The Rejection of Claims 1 and 7-9 under 35 U.S.C. § 112, second paragraph**

The Office Action rejected Claims 1 and 7-9 under 35 U.S.C. § 112, second paragraph as failing to particularly point out and distinctly claim the subject matter of the invention. Because claims 1 and 7-9 are cancelled, this rejection is moot.

**D. The Rejection of Claim 1 under 35 U.S.C. § 102(b)**

In the outstanding Office Action, Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by *Putz*. Although claim 1 is cancelled, Applicant addresses *Putz* with respect to new independent claim 10. For the reasons discussed below, the rejection is respectfully traversed.

As outlined above, the claimed invention recites a piston that rotates with respect to *two parallel axes of rotation* (e.g. 7, 8) that are normal to the cylinder sidewall (11). The sliding means or elements (e.g. 5, 6) which support the piston are normal to one another, and are normal to the axes of rotation (7, 8). This configuration allows the piston to move in a sliding way *in two directions*, normal to one another and normal to the piston's axes of rotation (7, 8).

*Putz* discloses a pump with a rotary piston R disposed inside of a housing 10. The piston R includes a recess 98 which receives a phasing link 80. A crankshaft CS is provided which rotates as a result of turning the piston R through engagement between a driving member 90 with a complementary opening in rotary piston R which also causes rotation of the phasing link 80.

In contrast to the claimed invention, the piston R rotates with respect to *only one axis of rotation* coaxial to a crankshaft CS. The piston R is capable of moving in a sliding motion in *only one direction* normal to the piston's longitudinal axis DF and normal to the piston's axis of rotation about CS.

Accordingly, Applicant submits that because all of the claim limitations are not identically found in *Putz*, *Putz* fails to anticipate independent claim 10. New dependent claims 11-15 are also believed to be allowable over *Putz* for the same reasons. Moreover, those claims recite additional features not found in *Putz*.

**IX. CONCLUSION**

Consequently, in view of the foregoing discussion and present amendments, it is respectfully submitted that this application is in condition for allowance. An early and favorable action is therefore respectfully requested.

Please charge any shortage or credit any overpayment of fees to BLANK ROME LLP, Deposit Account No. 23-2185 (124165.00101). In the event that a petition for an extension of time is required to be submitted herewith and in the event that a separate petition does not accompany this response, Applicant hereby petitions under 37 C.F.R. §1.36 (a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized above.

Respectfully submitted,

BLANK ROME LLP

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